

CLAIMS

1. A holster operable for attachment to a person for transporting and recharging a battery powered portable communication device comprising:
 - (a) a container having a cover with an outer surface having a photovoltaic cell affixed thereto, and a base separably attached to said cover, said cover and said base enclosing an externally accessible compartment dimensioned to receive and house a portable communication device therewithin;
 - (b) a clip pivotally attached to said container, said clip being operable for attachment of said holster to the person, thereafter enabling the person to rotationally adjust the orientation of said photovoltaic cell with respect to a source of radiant energy.
2. The holster of claim 1 further comprising a battery recharging circuit integral therewith, said battery recharging circuit being electrically connected to said photovoltaic cell.
3. A holster in accordance with claim 2 further comprising phone connector means operable for providing electrical communication between said battery recharging circuit and a rechargeable battery housed within said battery powered communication device.
4. A holster in accordance with claim 3 further comprising a visual connection indicator means operable for verifying electrical connection between said battery

recharging circuit and the rechargeable battery housed within the communication device.

5. A holster in accordance with claim 4 wherein said visual connection indicator means is a light emitting diode.

6. A holster in accordance with claim 4 further comprising a charging status indicator means operable for visually verifying that said battery recharging circuit is recharging the rechargeable battery housed within the communication device.

7. A holster in accordance with claim 6 wherein said charging status indicator means is a light emitting diode.

8. A holster operable for attachment to a person for transporting and recharging a battery in a battery powered electronic device comprising:

(a) a container having a cover with an outer surface having a photovoltaic cell affixed thereto, and a base separably attached to said cover, said cover and said base enclosing an externally accessible compartment dimensioned to receive and house the electronic device therewithin;

(b) a clip pivotally attached to said container, said clip being operable for attachment of said holster to the person, thereafter enabling the person to rotationally adjust the orientation of said photovoltaic cell with respect to a source of radiant energy.

- 1 9. The holster of claim 8 further comprising a battery recharging circuit integral
2 therewith, said battery recharging circuit being electrically connected to said
3 photovoltaic cell.
- 4 10. A holster in accordance with claim 9 further comprising phone connector means
5 operable for providing electrical communication between said battery recharging
6 circuit and a rechargeable battery housed within said battery powered electronic
7 device.
- 8 11. A holster in accordance with claim 10 further comprising a visual connection
9 indicator means operable for verifying electrical connection between said battery
10 recharging circuit and the rechargeable battery housed within the electronic
11 device.
- 12 12. A holster in accordance with claim 11 wherein said visual connection indicator
13 means is a light emitting diode.
- 14 13. A holster in accordance with claim 11 further comprising a charging status
15 indicator means operable for visually verifying that said battery recharging circuit
16 is recharging the rechargeable battery housed within the electronic device.
- 17 14. A holster in accordance with claim 13 wherein said charging status indicator
18 means is a light emitting diode.
- 19 15. A solar powered battery recharging device operable for receiving light from an
20 external source of light and converting energy in the light into electrical energy,

1 thereafter storing at least a portion of said electrical energy in a rechargeable
2 battery, the device comprising:

3 (a) a photovoltaic cell having a current output, a voltage output and a power
4 output defined by the product of the voltage output of the cell and the
5 current output of the cell, the power output of the cell having a maximum
6 value for a particular illuminance; and

7 (b) an electrical circuit having a charging current output and an input in
8 electrical connection with said voltage output of said photovoltaic cell and
9 charging current control means operable for comparing said cell output
10 voltage to a fixed reference voltage and feeding forward a signal to a
11 converter which adjusts an output voltage set point to automatically return
12 said current output of said cell to the optimum power output value for said
13 cell.

14 16. A solar powered battery recharging device in accordance with claim 15 further
15 comprising a supplemental battery in electrical connection with said charging
16 current output of said electrical circuit.

17 17. A solar powered battery recharging device operable for receiving light from an
18 external source of light and converting energy in the light into electrical energy,
19 thereafter storing at least a portion of said electrical energy in a rechargeable
20 battery, the device comprising:

1 (a) A holster operable for attachment to a person for transporting and recharging a
2 battery powered portable communication device, the holster comprising:

3 (i) a container having a cover with an outer surface having a photovoltaic cell
4 affixed thereto, and a base separably attached to said cover, said cover and
5 said base enclosing an externally accessible compartment dimensioned to
6 receive and house a portable communication device therewithin;

7 (ii) a clip pivotally attached to said container, said clip being operable for
8 attachment of said holster to the person, thereafter enabling the person to
9 rotationally adjust the orientation of said photovoltaic cell with respect to a source
10 of radiant energy; and

11 (b) a photovoltaic cell affixed to said holster and having a current output, a
12 voltage output and a power output defined by the product of the voltage output of
13 the cell and the current output of the cell, the power output of the cell having a
14 maximum value for a particular illuminance and an electrical circuit having a
15 charging current output and an input in electrical connection with said voltage
16 output of said photovoltaic cell and charging current control means operable for
17 comparing said cell output voltage to a fixed reference voltage and feeding
18 forward a signal to a converter which adjusts an output voltage set point to
19 automatically return said current output of said cell to the optimum power output
20 value for said cell.